

February 24, 2004

MEMORANDUM TO: Cathy Haney, Program Director
Policy and Rulemaking Program
Division of Regulatory Improvement Programs, NRR

FROM: Joseph L. Birmingham, Project Manager /RA/
Policy and Rulemaking Program
Division of Regulatory Improvement Programs, NRR

SUBJECT: SUMMARY OF JANUARY 21, 2004 MEETING WITH NUCLEAR
ENERGY INSTITUTE (NEI) ON THE STATUS OF STEAM GENERATOR
INTEGRITY ISSUES

On January 21, 2004, Nuclear Regulatory Commission (NRC) staff met with representatives from NEI and industry at the NRC's office in Rockville, Maryland. The purpose of the meeting was to discuss the status of the structural integrity performance criterion (SIPC). Attachment 1 is a list of those persons attending the meeting. Attachment 2 is a copy of the slides used by NEI at the meeting (ADAMS Accession No. ML040360478).

After introductions by NRC, NEI, and industry, industry presented a historical overview, a technical presentation, and a summary and target schedule for completion. Details of the presentation are in Attachment 2 of this memorandum. Highlights of each section follow.

In its opening remarks, industry stated that it realized the importance and the urgency of bringing this issue to closure. Industry presented the current status of the issue and the technical resources focused on achieving a resolution.

In the historical overview, industry reviewed the development of the original version of the SIPC (mid-2001). Significant changes were made to the SIPC in 2002 and a white paper on the changes to the SIPC was written in October 2002. In March 2003, a Catawba technical specification (TS) was submitted to NRC. A series of discussions on the SIPC followed until NRC and industry agreed in September 2003 that one approach for timely resolution may be to revise the SIPC such that the specific safety factors for accidents were not included in the proposed TS. This approach would allow resolution through the request for additional information (RAI) process. Industry then described recent meetings held in late 2003 related to this issue.

In the technical presentation, industry discussed their efforts related to the SIPC since September 2003. The main focus of this effort was to address the effects of bending on the structural limit of the tubes (i.e., how much degradation the tube could withstand and still maintain adequate margin to failure) and the impact of different safety factors on this limit.

The industry indicated that there was general agreement on the loadings on the tubes and the classification of these loadings as primary or secondary loads. However, their efforts did indicate the need to develop a burst/collapse model that combined membrane and bending loads. They indicated a model was developed but that it required further validation. Nonetheless, the results of the study using the existing model indicated that the structural limit would not be significantly impacted at most plants and the structural limit was only affected for certain degradation modes at certain locations. Details of this presentation are in Attachment 2.

Industry then presented details of additional work that they had planned for resolving the SIPC issue.

In summary, the industry indicated it was working to resolve the SIPC issue including performing testing to validate their burst/failure model. Upon validation of the model, the industry indicated that it would develop a methodology for plants to follow to ensure that bending loads (if significant) were properly accounted for in assessing their compliance with the SIPC. The industry indicated the target date for resubmitting the generic licensing change package with the revised SIPC is October 2004. This schedule is dependent on the outcome of their validation efforts and the availability of technical resources.

Project No. 689

Attachments: As stated

cc: Jim Riley, NEI

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List of Attendees for 01/21/04 meeting on SG Integrity Issues

<u>Name</u>	<u>Organization</u>
Jim Riley	NEI
Forrest Hundley	Southern Co.
Mohammed Behraves	EPRI
Greg Kammerdeiner	FENOC
Dan Mayes	Duke Energy
Russell Cipolla	APTECH Engineering
Larry Rudy	Duke Energy
Ed Fuller	EPRI
Jim Begley	Framatome ANP
Richard Coe	SCE
Stephen Leshnoff	Exelon Nuclear
Kevin Sweeney	Arizona Public Service
David Ayres	Westinghouse
Jerry Humphreys	NJ Bureau of Nuclear Engineering
Chris Grimes	NRC\NRR\DE
Emmet Murphy	NRC\NRR\EMCB
Lenny Olshan	NRC\NRR\DLPM
Louise Lund	NRC\NRR\EMCB
Bill Bateman	NRC\NRR\EMCB
Ken Karwoski	NRC\NRR\EMCB
Deann Raleigh	LIS\Scientech
Lane Hay	SERCH Bechtel